

SAN JUAN RIVER RECOVERY IMPLEMENTATION PROGRAM  
COORDINATION COMMITTEE  
11 APRIL 1996  
DURANGO, COLORADO

The meeting was called to order by Lynn Starnes, Deputy Regional Director, Region 2, who welcomed the participants and introduced Joe Mazzoni, Geographic Manager - New Mexico, as the new Service Chair of the Coordination Committee. Mr. Mazzoni then opened the meeting with an introduction of the Committee members and the audience. Those in attendance are listed on the attached form.

All Coordination Committee members were in attendance and included:

Joe Mazzoni	Fish and Wildlife Service, Region 2
Mike Stempel	Fish and Wildlife Service, Region 6
Patrick Schumacher	Bureau of Reclamation
Bob Krakow	Bureau of Indian Affairs
Joel Farrell	Bureau of Land Management
Bill Miller	State of New Mexico
(for Tom Turney)	
Peter Evans	State of Colorado
Scott McElroy	Southern Ute Indian Tribe
Les Taylor	Jicarilla Apache Indian Tribe
Dan Israel	Ute Mountain Ute Indian Tribe
Tom Pitts	Water Development Interests

#### Agenda

The agenda for the meeting (attached) was reviewed and modifications in timing of discussions and additional items for consideration by the Committee were included.

#### Procedural Guidelines

Bill Miller led the discussion of the proposed guidelines for the Coordination Committee, noting that the guidelines pertain only to the Coordination Committee and no other committee established by the San Juan River Basin Recovery Implementation Program. Based on that discussion, the Meeting Guidelines for the Committee were approved unanimously as follows:

Meetings of the Coordination Committee, established under the San Juan River Basin Recovery Implementation Program, executed by the Secretary of the Interior on October 28, 1992, (Section 5.1.1) are to be conducted under the following guidelines. These guidelines supplement the authorities and obligations of the Coordination Committee as provided for in the Program document. All meetings of the Coordination Committee shall be open to the public.

#### I. Notice of Meetings

- a) At least 14 days prior to each meeting, a notice of the meeting shall be provided to those names on the mailing list maintained by the Program Coordinator.

- b) At least 14 days prior to each meeting, notice of the meeting will also be published in the Farmington Times and the Durango Herald.
- II. Approval of Annual Work Plan and Annual Budget shall be by two-thirds majority vote of the Coordination Committee membership. All actions taken by the Coordination Committee will be done in meetings open to the public or ratified in meetings open to the public.
- III. Minutes of all meetings will be kept by the Program Coordinator and be available for public inspection. The minutes will include the date, time, and place of the meeting, names of committee members present and absent, the substance of all proposals considered and a record of any decision and votes taken showing how each member voted. Draft minutes will be distributed to Coordination Committee members within 10 working days after the meeting and shall be available for public inspection. Minutes will become the official record of the Coordination Committee only after approval by the Coordination Committee in open meeting. Copies of approved minutes will be distributed to those requesting copies. Approval of minutes of the previous meeting will be the first agenda item of the next meeting.
- IV. To the extent possible, Coordination Committee meetings will be held at locations within the San Juan River Basin.

#### Relationship of the Recovery Implementation Program to Section 7 Consultation

Jennifer Fowler-Propst, New Mexico Ecological Services Office, and Keith Rose, Grand Junction Ecological Services Office, provided the committee with a summary of consultations completed or ongoing in the basin. Since the inception of the Recovery Implementation Program, the Service has received numerous requests for consultation on additional depletions of water from the baseline. In those consultations, the Service, within its mandates and authority, has determined that the Program has not made sufficient progress in the recovery of the endangered fish species to support further impacts by water depletions or any other resource developments.

Several projects have been submitted for consultation with either requests for inclusion in the baseline or in the minor depletions account. Such requests have clarified the need to obtain and use a list of component projects that made up the aggregates used in the Animas-La Plata consultation baseline (which has been used as the San Juan baseline for all subsequent consultations). Such a list is at the present time unavailable and may take, based on estimates provided by staff from the Colorado Water Conservation Board, Department of Natural Resources, at least a year to compile. The projects used in the A-LP baseline were current only to 1982 and, therefore, there are significant questions concerning what water developments and depletions have occurred since that date. Mike Stempel committed Region 6 of the Service to analyzing the baseline to clarify what projects can be considered as included in that listing. Jennifer Fowler-Propst clarified that reoperation of Navajo Dam pursuant to the A-LP opinion offsets the depletion impacts of all projects in baseline.

The second concern discussed by the Committee is the ambiguity regarding what can and cannot be considered a minor depletion and, thus, eligible for consideration in the annual 3,000 acre-foot ceiling. The current listing of minor depletions (attached)

includes an extremely wide range of depletions (0.02 af to 500 af) with a similarly wide range of years for which the depletions were allowed (1 to 5 year contracts for water from Navajo Dam, to depletions for stock ponds that are considered permanent depletions). The Service has reviewed each depletion during consultation for its applicable inclusion in the minor depletions account. This review has weighed the amount of water taken with the length of time it will be depleted. A large depletion for a short period of time was considered a viable minor depletions account action; as was a minimum depletion for perpetuity. The proposed Red Mesa Reservoir had been considered for the minor depletions account by the Service. However, the depletion proposed for the Reservoir (approximately 1200 af existing and approximately 1000 af new, resulting in a total of 2200 af depletion that had to be consulted upon as an integral whole) was rejected as far too large by the Service to qualify for the minor depletions account. This depletion is 400% more than the largest depletion in the account (500 af for 5 years) and would not be considered a temporary depletion, as the majority of the larger minor depletions consulted upon to date.

The Committee was provided a summary of the consultation process for the Red Mesa Reservoir and the biological basis upon which the pond rehabilitation at Utah's Wawheep Fish Hatchery for raising razorback suckers to stock into the San Juan River was determined as a reasonable and prudent alternative to the jeopardy arising from the Reservoir's depletion of 2200 af from the San Juan system. Mr. Pitts expressed concern that the cost of the alternative (\$50,000 - less than 2% of project cost), if considered on an acre-foot basis (using only the new depletion figure) was \$50 per acre-foot and more costly than the Upper Basin Recovery Programs depletion of \$13 per acre-foot. The Service representatives explained the difference in the respective programs and the benefits to recovery of the razorback sucker that would be achieved through the implementation of this alternative. Region 6 stated its intention to issue the Biological Opinion in the near future.

The San Juan and Rio Grande National Forests have also requested consultation with the Service on all depletions on National Forest lands. The consultation includes approximately 38,000 af of historic depletions, and the Service is currently working with the National Forests to determine what depletions were included in the baseline and what future depletions are new but could be small enough to consider in the minor depletions account.

Mr. Krakow and other Committee members expressed concern at the amount of water to be depleted by ongoing consultations that might seriously impact the ability to successfully complete, by finding reasonable and prudent alternatives, major consultations for the Navajo Nation. If consultations go forward for small projects, flexibility for avoiding jeopardy in consultations for the "big" depletions may be foregone. The Bureau of Indian Affairs requested consultation for the construction and operation of Block 9-11 of the Navajo Indian Irrigation Project in 1992, but included in that request an extension of the consultation until information to be gathered during the RIP's 7-year research effort could be analyzed and a Biological Assessment prepared for the blocks. To date, no action has been taken on the consultation request; however, other consultation requests by other entities have been processed and completed by the Service.

In order to address these issues, the Coordination Committee agreed to form a task group comprised of Messrs. Stempel, Evans, Pitts, McElroy, and Krakow to report to the Committee by August 1, 1996, on the following:

- 1) Recommendations concerning how the Recovery Implementation Program can assist the Service in the review and consistent application of reasonable and prudent alternatives.
- 2) Recommendations on the criteria for projects that can be considered for inclusion in the minor depletions account.
- 3) Recommendations on the interaction of the requirements of section 7 consultation with Trust responsibilities for Indian tribes.
- 4) Recommendations on how more certainty can be provided to water developers.

#### 1996 Workplan and Budget/Integration Report

The 1996 workplan and budget was originally provided by the Biology Committee to the Coordination Committee in November 1995. Since that date there have been 3 revisions in response to comments by the Coordination Committee and to budget cuts for the participating federal agencies. Two items in the workplan were discussed in detail:

**Peer Review** - The proposal by the Biology Committee, and an additional scope of work proffered by Mr. Pitts were reviewed. The objectives of the two proposals were noted to be essentially the same; the differences in costs and the reporting process were noted. Concerns expressed by members of the Coordination Committee included the lack of commitment by peer reviewers without pay; the selection of peer reviewers by members of the Biology Committee, and opportunities for the Coordination Committee to discuss the findings with the reviewers. The Biology Committee members present responded to questions by the Committee. Most potential panel members (including individuals who have served as peer reviewers in the Upper Basin Program) have indicated their commitment to serve in the review capacity as part of their professional commitment as biologists and would not seek recompense for this duty other than payment of travel expenses. Additionally, with 7 months of the federal fiscal year gone, it was not considered feasible by representatives from the Bureau of Reclamation and Fish and Wildlife Service to expand this year's commitment to peer review to the extent that significant contractual documents would be needed. And, rather than a contract, the expectations of the review would be provided to panel members in letters requesting their commitment to the process. The names of potential panel members would be submitted to the Coordination Committee for review and approval. The results of the review would be available for consideration in the formation of the 1997 workplan and budget. Members of the Coordination Committee also expressed interest in attending the September 1996 meeting between the reviewers and the Biology Committee. A final report of the review process will be prepared and submitted to the Coordination Committee.

**Integration Report**-Committee members questioned the need to fund the Integration Report every year. Members of the Biology Committee clarified that, for 1996, the report will constitute more integration than what was essentially a summary in 1995. The Biology Committee itself is dividing into 4 subgroups to address 1) young native and endangered fishes, 2) adult native and endangered fishes, 3) young non-native fishes, and 4) adult non-native fishes. The integration report will reflect a synthesis among these groups and will provide a forum through which discussion and/or issue papers

(e.g. fish passage) could be transmitted to the Coordination Committee, together with recommendations from the Biology Committee. This integration report can also incorporate the findings and recommendations of the peer review panel, can serve to discuss the internal peer review process of the Biology Committee itself, and can address and correct any identified inconsistencies.

**Other Components of the 1996 Workplan and Budget** - The increase in numbers of young Colorado squawfish from 20,000 to 100,000 was discussed and the need for the increase explained by the Biology Committee. The reasons for ceasing the specific research effort on mechanical removal of catfish (the lack of success to justify continued distinct removal efforts and the ability to remove catfish during other research efforts) were presented by the Biology Committee. The Biology Committee reported that all recommendations provided in the 1995 Integration Report have been included in the 1996 workplan.

Bill Miller moved that the Coordination Committee approve the 1996 workplan and budget as presented by the Biology Committee with the requirement that the Biology Committee provide the Coordination Committee copies of the letter to be sent to prospective peer reviewers. Mr. Evans seconded; and the motion was passed unanimously.

#### Long Range Budget

The Biology Committee has prepared three drafts of a long range budget (FY 1988) and transmitted them to the Coordination Committee in April, May, and July 1995. The subcommittee of Messrs. Pitts, Gold, Krakow, and Evans were assigned the task to review the product of the Biology Committee, contact other participating agencies to determine estimates of in-kind contributions, and report back to the Coordination Committee. The long range budget estimate was transmitted by Mr. Pitts' February 28, 1996, letter. Questions concerning the amount of funds for operation and maintenance of capital improvements were answered. Questions concerning the basis upon which the estimates of in-kind contributions were made by other agencies were not. Definition and updating of the in-kind estimates was the original charge of the subcommittee, but was not accomplished as assigned in June 1995. Program Coordinator Jim Brooks assumed responsibility for completing the budget estimates, including accurate definition of in-kind contributions by all affected agencies and institutions.

The budget estimate was provided for review and no action requested of the Coordination Committee.

#### Long Term Capital Projects Funding

Mr. Pitts and Mr. Evans presented the draft legislation and discussed the anticipated time frame for transmittal to Washington for discussions with Congressional representatives and the Office of Management and Budget. Mr. Evans emphasized that the two RLPs have to work together on the proposed legislation and that representation by the San Juan Program at the meetings is needed. The next meeting to discuss the draft legislation is scheduled for May 21, 1996. Members of the Coordination Committee expressed concern that some separation between the recovery

implementation programs was desirable. The State of Utah would want its money to be spent in the Upper Basin, where it is a participant. Similarly, the BIA would want its funds assigned to the San Juan.

#### Winter Low-Flow Test

Don Fazzan, Bureau of Reclamation, provided a summary of the results of the 2-week low flow test conducted in January 1996. Based on the results of the 2-week test, and on an October 1995 Solicitor's Opinion, the Bureau does not anticipate the need to prepare an EA or EIS on the proposed 4-month test in 1996-1997. The significant issues identified by the Bureau and the preliminary results of monitoring during the 2-week test are provided in the attached minutes of the March 6, 1996, Bureau meeting concerning the test flows. Water quality testing by Arizona Public Service Company found increased levels fecal coliform during the test flows. Low releases for the extended 4-month period may be of concern. A final report of the two week test flow will be available by mid-July 1996.

#### Navajo Nation

Mr. Krakow expressed the continuing interest of the Navajo Nation in participating in the Program in a manner similar to that of the water development interests. The water development interests are not signatories to the Cooperative Agreement that committed parties to the program. Neither would the Navajo Nation become a signatory to the Cooperative Agreement. The Coordination Committee requested that a representative of the Nation attend the next meeting of the Coordination Committee and make a presentation to the Committee.

#### Other

It was requested that all correspondence for Coordination Committee consideration from the Biology Committee and/or Program Coordinator be sent at least two weeks prior to the upcoming meeting. It was recognized that in some cases the two week prior mailing is not possible.

It was also noted by Biology Committee members present at the meeting that all correspondence produced by Coordination Committee members should be copied to the other SJRRIP committees. This will ensure that updated and accurate information on Program activities will be known by all participants.

#### Next Meeting

The next meeting of the Coordination Committee will be held in Farmington, New Mexico, from 9:00 am to 4:00 pm on August 16, 1996.

Revised 11/3/96 (Comments from Mazzoni, Miller, Pitts)

SAN JUAN RIVER RECOVERY IMPLEMENTATION PROGRAM  
WINTER LOW FLOWS, NAVAJO DAM  
Task Meeting - January Test Releases

RECEIVED

March 6, 1996

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USFWS - NMESO

*Attendees:*

*Don Fazzan, USBR, Durango  
Ralph Pasquale, USBR, Durango  
Cookie Seale, USBR, Durango  
Kirk Lashmett, USBR, Durango  
Tom Strain, USBR, Durango  
Marc Wethington, NMDG&F  
Bob Krakow, BIA/NIIP  
Jennifer Fowler-Propst, FWS*

*Rege Leach, USBR, Durango  
Ron Sutton, USBR, Salt Lake City  
Karen Blakney, USBR, Salt Lake City  
Noreen O'Donnell, USBR, Durango  
Mike Velasquez, USBR, Navajo Dam  
Mark Chiarito, USBR, Durango  
Ron Bliesner, Keller-Bliesner Engineering  
Jim Brooks, FWS*

Don Fazzan opened the meeting with introductions of those in attendance followed by an outline of the meeting agenda. He emphasized the main thrust of the meeting was to discuss the results of the January 2-week test. Researchers would ultimately be asked to provide summaries of investigations.

Don gave a report on the process of ramping down the test releases beginning January 10, 1996. The USGS manages all gauges on the San Juan River. Sites are equipped with Data Control Platforms (DCP's) with the exception of Shiprock. Manual readings were required at the Shiprock site. (See corrected data on daily averages of flows, Attachment 1, San Juan and Animas River Flow Measurements.) Most of the data for Animas River at Farmington are estimated values.

By January 12, flows had stabilized and were within 5% of the target range. Observers could detect effects of flow reductions. There were some problems with the Farmington gauge. The flow meter at Farmington had to be reinstalled and recalibrated during the 2-week test. The Animas River has been running slightly below average since January.

Measurement is an issue, particularly at Shiprock. A USGS technician worked on the gauges numerous times to keep them operating. The flow criteria for habitat range was 500 cfs. Flows of 500 cfs at Shiprock should result in 600 cfs at Bluff (in accordance with the SJRRIP).

A DCP at Shiprock is needed. The New Mexico Interstate Stream Commission has recommended shutting this gauge down due to vandalism but the Biology Committee has urged the state to keep this equipment in place. It would be even better to have two gauges.

In the quest to improve gauging at the dam, an attempt was made to install a flow meter on the penstock; however, it was not reliable.

In a long-term operation, a minimum flow of 500 cfs needs to be maintained at Shiprock. The least fluctuation is at the dam. The two power plants (Arizona Public Service, Four Corners Power Plant 20 miles west of Farmington, New Mexico [south of Hwy. 550]; and Public Service Company of New Mexico, San Juan Generating Station [north of Hwy. 550] have a total pumping capacity of 71 cfs, which is a significant draw from the river. There is a need to coordinate with power plant operators if they plan to crank up to 70 cfs during the 4-month test. We should work out an agreement on pumping criteria. Coordination should also include the City of Farmington. Reclamation will cooperate by making adjustments at the dam to provide as steady a stream as possible.

The Biological Opinion (ALPP) states a range of 250-300 cfs; however, the Biological Committee has requested test flows of 250. Much depends on flows from tributaries. The more water that is flowing in the Animas River, the less water that needs to be released from the dam [to augment required levels]. An assessment of current flows in tributaries will be made the week before the 4-month test begins. We'll start ramping down releases to 250 cfs if there are no concerns. After this meeting, Kirk will provide Ron the projected minimum flows in the Animas River at Farmington under ALPP operations.

During the January 1996 2- week test, Don sent the flow data to the San Juan Flyfishing Federation frequently. Power plant operators estimated about \$60,000 in lost revenues and thought there was possibly some cavitation damage. Reclamation utilizes the auxiliary gates when releases are low. The power plant was shut down for about a month prior to the 2-week test for plant repairs.

## Test Results

### Ron Sutton - IFIM Transects

Technicians measured 240 cfs at the stream channels and were comfortable that the model was within 2% of measurements. Instream flow habitat was looked at from the Dam, 4 miles to Texas Hole. The model loss of 24% of habitat in this 4-mile area was quite significant. In Transect 5, adult rainbow trout marked for movement immediately bolted upstream. Once the flow went down, the trout went above Transect 5 (a cable hole). By Mark's estimate (derived by electro-fishing) there are approximately 10,000 fish above Texas Hole. Wetted surface area is the width by actual measurement. Ron's definition of trout habitat is where the fish prefer to be (depth, velocity, and substream). See Attachment 2: Table 1. Effects of flow reduction on trout habitat above Texas Hole in the San Juan River; Table 2. Effects of flow reduction on trout habitat below Texas Hole in the San Juan River; and Table 3. Effects of flow reduction on trout habitat in the San Juan River Quality Reach (above and below Texas Hole). Ron composed these models last summer working with Bill Miller, Miller Ecological Consultants, Inc. Ron has a diskette of his field notes and habitat mapping.



An increase in habitat was observed when the flow lowered, which didn't make sense. The increased turbidity makes it difficult to see due to the disturbance caused by shocking. Caution is warranted on making conclusions of impacts. Outfitters and guides are anxious to hear about the test results. Mark is scheduled to speak to several groups. It is agreed that the more information these groups receive, the more people will understand. Presentations to smaller groups works well as it gives more opportunity for question and answer sessions. How we present the information is very important. A formal report will take awhile. Public outreach will be looked at by potential plaintiffs. New Mexico Trout Unlimited has professional experts lined up to review all the field data, videos, etc. Per the outcome of the San Juan Flyfishing Federation lawsuit, the raw data should be sent out as soon as possible. A long lag time between dissemination of the raw data and a formal report will not bode well for the agencies involved. It is important to ensure that the information isn't dribbling out from a variety of sources. Therefore, we need to decide who will assume the responsibility for writing which portions of the formal report.

Mark can have his field data ready in 2 weeks (about March 20) and macroinvertebrate sampling hopefully by June 1. Mark will provide this data to Ron for his needs pending an agreement with State of New Mexico essential to allow release of information from NMDG&F.

The court judgement will override. All information should be made available.

#### Trout Movements/Macroinvertebrate Results/Water Quality/Angler Survey/Fish Health - Mark Wethington

Observations of fish health included on a daily basis looking for strandings and mortalities during the 14-day period. No significant impacts were observed. Once the water started going down, fish did not wait, they moved immediately. Macroinvertebrate sampling was conducted for 12 days into the test period and once since the test was completed. Samples are being compared with 3 previous years of data. Regarding changes in bug numbers, we may see on the first flow reduction whether bugs will move. Some sites throughout the sampling may experience bigger drop-offs in bug numbers at 250 cfs. Four sites had no significant change. In the top part, the riffle bars were dewatered. Riffle bars were selected for sample sites for ease in making determinations. Dead fish are not uncommon in any case as there are normal fatalities from being caught, hooked or isolated. About 4-6 dead fish were found during the 2-week test period. The majority of fish basically moved into deeper water.

No significant changes were detected in water quality monitoring for dissolved oxygen and water temperatures. Water temperatures dropped off primarily at Blanco Bridge. Nitrate levels are of concern to fishermen. Normal levels are quite low and were raised somewhat during the test period. Coliform tests for fecal count indicate downstream, long-term needs should be considered. Fish that are already stressed can be impacted due to a compounding factor. Fat bag tests did not show anything remarkable during the test period. BLM's PAH data should be obtained. Random PAH samples are taken every 5 river miles.

Angler surveys have been conducted since the early '80's but were more intensive during the 2-week test period. Catch rates changed marginally in the Quality Water section. The weather was nice and there were lots of fishermen, particularly 5 miles below the dam. A lot of fish were taken in this stretch of the river. Some of the fishermen were there as avid observers of the effects of the low flow test releases. Catch rates are probably 20% higher in this section of the river. There were 25-50 and sometimes 100 people interviewed in the area from Cottonwood Campground to Gobernador Wash. The average fish taken is usually a rainbow 8-12 inches in length. The catch rate in the regular section averaged out 1/2 fish an hour compared to the catch rate in the quality water section which is twice that. During the test, the average of January 1996 was comparable to the average of January 1995. There hasn't been much fish movement since the end of the test. The fish stay where they are at sometimes their entire lives (within about 20 feet).

Several outfitters including Born n' Raised and Duranglers pulled their guides off of the river basically giving the message that they were too good for this (or put another way, would not stoop so low). Other outfitters basically said se la vi. Rizutos were conducting business as usual. They have about 14 guides and probably would not support closing the river. Some people would like to see the river closed during the 4-month test. It is possible they may approach the Game Commission. Outfitters voluntarily took an economic loss when they pulled their guides off of the river during the test period which caused some negative publicity. It is believed that the fishermen have conducted some studies of their own but may not have any serious measurements or documentation. A bleak picture can be painted if you are selective in your photography.

Loss in wetted areas (see Attachment 2) on the transects vary from 23% to 0%. Fisherman days in February were comparable to last October. Well over 200 people were fishing some days this past year which translates to 30,000 angler hours, the second highest year of record. There are a lot of people fishing year round now. In fact, some day, people may become the biggest influence on the river.

In summary, Mark could probably put together the balance of raw data in 2 days. When it comes to the macroinvertebrate sampling, picking out 2500 midges out of the debris could be a major job as there can be as many as 85,000 bugs per square meter. Bugs will recolonize sometimes rather quickly in their habitats.

There appears to be a decrease in fish size through the years. For example, in 1992, the average size was 16.9 inches and in 1995, the average size was 12.5 inches.

### San Juan Geomorphology - Ron Bliesner

(See Attachment 3.) The gauge at Bluff is fairly reliable. The 4-Corners station is available through the Hydromet. There will be much more assessment of velocities, substrata and water quality for the 4-month test that was not performed for the 2-week test. Aerial videography hasn't been processed yet. There is probably a 3% error potential. Mapping will be completed to show wetted areas. Samples were taken in each habitat area to replicate available data in 4-6 months.

The USBR Regional Office has copies of one video. The 2-week test aerial video should be offered to the SJFF without delay.

### Razorback Sucker Tracking - Jim Brooks

On an expedition January 22, 3 out of 15 radio-tagged fish were picked up in the river mile area 1.2-88.4 above Bluff. All 3 fish had been stocked at Hogback. There was no noticeable change in activity and no observations were made of stranded or dead fish. Jim and crew plan a river trip the week of April 15 to tag some squawfish in preparation for the 4-month test.

Where possible, Ron recommends not computerizing data if a hard copy of field notes is sufficient.

### Diversion Structure Impacts - Tom Strain

The Citizens Ditch Diversion at Navajo was shut off during the test. (A gravel berm was constructed to augment diversion capability.)

The Bloomfield Refinery channel needs to be cleaned out prior to the 4-month test. The Refinery pumped at the maximum rate during the 2-week test period.

The power plants dropped 4-6 inches at the diversion during the 2-week test period. (The FERC for the City of Farmington powerplant refers to a 315 cfs flow in the river.)

There was no report from Shiprock Municipal, therefore operations must not have changed.

The Cottonwood Campground will have to extend or trench for the 4-month test.

All diversions should be able to get water with some modifications for the 4-month test.

### Observation of Riparian Areas - Kirk Lashmett and Karen Blakney

In reporting changes in stages, 800 - 500 - 250 cfs, monitoring points were established at six stations:

Station #1	0.04	(First station below dam)
Station #2	0.33	
Station #3	0.37	(Archuleta)
Station #4	0.24	
Station #5	0.61	(Turlock--2 miles below Archuleta)
Station #6	0.47	(Blanco Bridge)

Near Station #1 just below the dam, the effect during the winter on some shallow, 2-foot level channels is unknown. Most groundwater supplies are probably tied to the river. There are extensive riparian areas tied to groundwater. The way water is released affects the top two stations dramatically. Ron Bliesner has several videos of this reach at varying flows. Mike Pucherelli, USBR Denver Office, recommended aerial photography over videos.

#### Public Relations Program Impacts

A mail list has been established and continues to grow. Reclamation's Durango Office has sent out one letter to interested parties in response to form letter questions. In addition, Jim Brooks sent out a letter to many of the same parties registering concern over the effects of reduced flows.

To keep people informed, we are considering several information avenues:

- √ Newsletter (one-page update style)
- √ Recording of Navajo releases (weekly during 4 month test?)
- √ Monthly Area Reservoir Statistics -- news release

Coordination between agencies to attain consistency would be the best approach. Currently, there hasn't been much emphasis by FWS, USBR, or BIA on public relations for the SJRRIP. We should consider an interagency effort there also to avoid the misinformation that often circulates in the absence of a plan to routinely update information about current events.

Circulating information should begin immediately. For example, USBR UC Regional Director Charles Calhoun recently made the decision, in consultation with DOI solicitors, that the 4-month test does not require special NEPA compliance such as an environmental assessment prior to testing. It was the opinion of the solicitor that Reclamation was authorized to operate Navajo Dam to meet downstream purposes and manage the resources as the agency deems appropriate. This authorization includes varying releases from 0 to 5,000 cfs. New Mexico Interstate Stream Commission agrees that NEPA isn't necessary but we know there are individuals that believe it is. Further litigation is a strong possibility.

Involved agencies, USBR, BIA, FWS, and NMDG&F, should plan to meet 2 months prior to the 4-month test. A contact person for each agency on Navajo Low Flows should be established.

Don will contact Reclamation's public affairs office to discuss an appropriate mechanism to disseminate the 2-week test report and appropriate coordination with FWS regional public affairs, Tom Bauer.

Reclamation will develop a news release soon.

We need to understand the biological changes before we can measure economic impacts. There should be no prejudgement or indication that it is possible to predict the outcome of reduced flows in the winter.

At the SJRRIP meeting on April 11, an overview of the public information approach could be provided. Jim Brooks will discuss this with FWS PA Tom Bauer.

Bob Krakow will establish a PI contact for NIIP headquarters in Farmington.

The lawsuit filed in December 1995 can be reactivated within 6 months with ease. The effort to complete an executive summary (bottom line information only) of each technical report needs to continue. Please see Attachment 4 for assignments and completion dates. The summary of data should be focused on what is relative and include conditions prior to the 2-week test beginning January 10, 1996. Don Fazzan, Kirk Lashmett, and Ron Sutton will review all drafts. Reclamation will compose a summary of all reports and ensure that the public is informed that the summary is available. By April 1, a letter to interested parties (perhaps with an offer of a video) with a draft of methods used in data collection would be ideal. The raw data will be provided only to the plaintiffs in the December lawsuit.

SJRRIP--Winter Low Flows @ Navajo Dam  
 Task Meeting--March 6, 1996  
 January 1996 Test Releases

TASK LIST

Assigned	1996 Due Date	Task
Don Fazzan	March	- Distribute Navajo Dam test flow data to interested parties [Action complete, see Attachment 1)
Ron Bliesner	March	- Provide wetted area mapping to Ron Sutton
Kirk Lashmett	March	- Will provide Ron the projected minimum flows in the Animas River at Farmington under ALPP operations.
Don Fazzan	March	- Will ensure an essential agreement with State of New Mexico to allow release of information from NMDG&F
Don Fazzan Cookie Seale	March	- Will consult with Public Affairs re. mechanics of approach and development of PI plan
Cookie Seale	April	- Gather Issue Briefs to share w/other agencies
Rege Leach Ron Bliesner	April	- Presentation to San Juan Flyfishing Federation - " New Mexico Trout Unlimited, Albuquerque - "Outfitter and Guide Operations at Navajo
Rege Leach	April	- Offer the 2-week test aerial video to the SJFF without further delay
Rege Leach Cookie Seale	April	- Ensure the circulation of information immediately, i.e., Charles Calhoun's recent decision in consultation with DOI solicitors that the 4-month test does not require special NEPA compliance such as an environmental assessment prior to testing. (Explanation of why no NEPA & test purpose)

Cookie Seale	April 1	- Draft a letter to interested parties offering a video and explanation of methods used in data collection.
Don Fazzan	April 1	- Ensure a contact person for each agency on Navajo Low Flows
Bob Krakow	April 1	Bob Krakow will establish a PI contact for NIIP headquarters in Farmington
Don Fazzan Cookie Seale	April 1	- Draft a news release re dissemination of 2-week test data and upcoming 4 month test
Researchers	April 1	- Complete an executive summary (bottom line information only) of each technical report needs to continue. Please see Attachment 4 for assignments and completion dates. The summary of data should be focused on what is relative and include conditions prior the 2-week test beginning January 10, 1996.
Jim Brooks Don Fazzan Cookie Seale	April 4	- Coordinate an overview of the public information approach for presentation at the SJRRIP meeting on April 11. (FWS PA Tom Bauer and USBR PA Barry Wirth will be contacted by Jim and Don, respectively, before the SJRRIP meeting.)
Rege Leach	April 11	- Presentation to SJRRIP on approach/mechanics
Researchers	April 12	- Summaries to Don Fazzan on methods and data analysis available (for SJFF and attorneys)
Researchers	April 12	- Status Report of data collection to Don Fazzan (for interested party mailing list)
Researchers	April 12	- Draft to Don Fazzan of field data
Ralph Pasquale	April 12	- Obtain BLM's PAH data
Don Fazzan	April 26	- Will draft executive summary and transmit with raw data to SJFF attorneys.
Don Fazzan	May 1	- Will review draft reports of field data prior to

Kirk Lashmett  
Ron Sutton

finalization. Reclamation will compose a summary of all reports and ensure notice to the public that the summary is available.

Researchers	June 17	- Final Draft Report to Don Fazzan of Field Data
Don Fazzan Rege Leach	July 1	- Final Draft Report by E-Mail/Internet/Disk to Researchers for review
Don Fazzan	July 8	- End of Review Period -- Comments/changes to Don Fazzan for incorporation
Don Fazzan	July 15	- Dissemination of Final Report
Rege Leach	September	- Set up and coordinate a meeting 2 months prior to the 4-month test with involved agencies, USBR, BIA, FWS, and NMDG&F
Don Fazzan	September	- Install DCP at Shiprock - Establish coordination with City of Farmington, power plant operators and other users - Set up staff shifts on Hydromet data
Cookie Seale	October	- Establish layout and coordination for one page newsletter for updates to the public on the 4 month test releases.



Report Date: 02/23/96

SAN JUAN & ANIMAS RIVER FLOW MEASUREMENTS					
Date	San Juan nr. Archuleta New Mexico	San Juan at Farmington New Mexico	San Juan at Shiprock New Mexico	San Juan at 4-Corners Colorado	Animas River at Farmington New Mexico
01/01/96	506	882	844	915	260
01/02/96	506	849	840	913	250
01/03/96	500	830	808	895	240
01/04/96	502	851	789	874	250
01/05/96	502	872	819	886	255
01/06/96	508	861	907	956	260
01/07/96	506	872	905	956	250
01/08/96	504	847	885	942	260
01/09/96	503	831	876	930	260
01/10/96	382	841	876	931	250
01/11/96	228	740	802	897	240
01/12/96	241	580	625	733	240
01/13/96	241	605	602	673	235
01/14/96	241	627	607	669	230
01/15/96	241	604	607	663	240
01/16/96	241	609	597	659	260
01/17/96	244	640	596	648	260
01/18/96	241	610	631	693	250
01/19/96	241	590	616	668	250
01/20/96	244	625	531	641	250
01/21/96	242	598	527	606	255
01/22/96	244	607	512	602	255
01/23/96	244	578	526	579	255
01/24/96	244	569	563	610	255
01/25/96	354	585	587	658	260
01/26/96	482	760	608	656	260
01/27/96	478	810	814	912	260
01/28/96	480	820	853	1020	260
01/29/96	487	830	876	973	260
01/30/96	489	850	880	900	255
01/31/96	491	870	869	919	255
02/01/96	492	880	883	926	250
02/02/96	482	880	919	932	255
02/03/96	483	880	843	886	250
02/04/96	483	873	793	827	260
02/05/96	484	831	778	814	255
02/06/96		840		822	260
02/07/96		840		831	261
02/08/96				826	261
02/09/96					261
02/10/96					261
02/11/96					262
02/12/96					
02/13/96					267
02/14/96					269
02/15/96					278
02/16/96					285
02/17/96					288
02/18/96					
02/19/96					
02/20/96					314
02/21/96					322
02/22/96					
02/23/96					

All values provided by US Geological Survey, Albuquerque Field HQ  
Data is provisional and subject to change prior to publication in USGS Hydrologic Data  
Majority of data for Animas River at Farmington are estimated values.

Table 1. Effects of flow reduction on trout habitat above Texas Hole in the San Juan River.

Parameter	500 cfs	250 cfs	Change
Measured Wetted Surface Area (ft <sup>2</sup> )	3134028	3001832	-4%
Modeled Wetted Surface Area (ft <sup>2</sup> )	3208142	2937021	-8%
Average Width (ft)	312	293	-6%
Average Depth (ft)	1.5	1.3	-0.2 ft
Average Velocity (ft/sec)	1.0	0.7	-0.3 ft/sec
Trout Habitat Area (ft <sup>2</sup> )	549555	419279	-24%

Table 2. Effects of flow reduction on trout habitat below Texas Hole in the San Juan River.

Parameter	500 cfs	250 cfs	Change
Measured Wetted Surface Area (ft <sup>2</sup> )	3555526	3415881	-4%
Modeled Wetted Surface Area (ft <sup>2</sup> )	3599123	3374763	-6%
Average Width (ft)	194	185	-5%
Average Depth (ft)	2.6	2.3	-.3 ft
Average Velocity (ft/sec)	1.1	0.8	-.3 ft/sec
Trout Habitat Area (ft <sup>2</sup> )	364548	367625	1%

Table 3. Effects of flow reduction on trout habitat in the San Juan River Quality Reach (above and below Texas Hole).

Parameter	500 cfs	250 cfs	Change
Measured Wetted Surface Area (ft <sup>2</sup> )	6689555	6417714	-4%
Modeled Wetted Surface Area (ft <sup>2</sup> )	6807266	6311785	-7%
Average Width (ft)	259.6	244.8	-6%
Average Depth (ft)	2.0	1.7	-.3 ft
Average Velocity (ft/sec)	1.0	0.7	-.3 ft/sec
Trout Habitat Area (ft <sup>2</sup> )	914103	786904	-14%

Preliminary Assessment  
Habitat Impacts of Winter Low Flow  
in  
Endangered Fish Habitat Range  
March 5, 1996

Quantitative analysis completed for 3 river miles (127-130):

- Flows averaged about 540 cfs (min 514)
- 0.33 ft drop in water surface elevation
- Less than 1% decrease in total wetted area
- decrease in backwaters/embayments
- decrease in runs
- increase in shoals
- increase in riffles
- increase in pools and eddies
- little change in complexity
- less secondary channels
- runs comprise 68% of wetted area compared to 80% at 900 cfs

Qualitative Assessment of Reach from Mexican Hat to Clay Hills

- Generally more riffles, eddies & boulder influence in the canyon
- Substantial increase in mid-channel backwaters in lower 17 miles
- Little change in wetted area
- less than 0.5 ft drop in water surface elevation

# SAN JUAN RIVER - RECOVERY IMPLEMENTATION PROGRAM (SJRRIP)

## WINTER LOW-FLOW RELEASE

### DRAFT REPORT SCHEDULE

A Two-Week Low-Flow test release from Navajo Dam was conducted between January 10 and January 25, 1996. The results of this test and the reporting of the results and/or conclusions must be published in a report for use by the SJRRIP participants and the general public. Responsibility for the report and its contents rests with the Bureau of Reclamation. A proposed report completion schedule is shown below. This proposed schedule has been prepared for use in determining a final schedule to be resolved at a March 6, 1996 meeting of the two-week low-flow test participants.

Task Description	Responsible Person	Completion Date
IFIM Transects	Ron Sutton	March 1996
Trout Movements	Mark Wethington	April 1996
Macroinvertebrate Lab Results	Mark Wethington/Highland Univ.	June 1996
Water Quality Impacts	Mark Wethington	May 1996 (temp, O2, N)
Angler Survey Results	Mark Wethington	March 1996 (no. & size)
Fish Health Observations	Mark Wethington	May 1996
San Juan Geomorphology	Ron Bliesner	April 1996
Endangered species impacts	Frank Pfeifer	May 1996
Power Plant Impacts	Don Fazzan	March 1996
Diversion structure impacts	Tom Strain	March 1996
Wetland impacts	Kirk Lashmett	April 1996
Bollack repercussions	Karen Blakney	March 1996
Aerial photography	Kirk Lashmett	May 1996
Public relations program impacts	Cookie Seale	March 1996
NEPA compliance issues summary	Ralph Pasquale	March 1996
NEPA compliance recommendation	Ralph Pasquale	May 1996
Recommendation for 4-month test	Kirk Lashmett	May 1996

The Durango Bureau of Reclamation office will have responsibility for preparation of the final report. The lead person for the final report will be Kirk Lashmett.

COMPUTATION SHEET

BY	DATE	PROJECT	SHEET ____ OF ____
CHKD BY	DATE	FEATURE	
DETAILS			

SAN JUAN RIVER - 2 WK. LOW-FLOW

03/06/96

SIGN-UP SHEET

NAME	REPRESENTING	PHONE No.	FAX No.
Bob Krakow	BIA-NIIP	505-325-1864	
Ron Bliesner	Keller-Bliesner Eng.	801-753-5651	801-753-6139
Marc Wethington	NMGF	505-632-8818	
Jennifer Fowler-Probst	FWS-Ecological Services	505-761-4525	761-4542
Jim Brooks	FWS-Fishery Resources	505/761-4538	4537
Ron Sutton	USBR	801-524-6292x9	801-524-5499
Kirk Lashmeyer	USBR	(970) 385-6561	970-385-6563
Karen Blakney	USBR	(801) 524-6292x8	(801) 524-5499
Tom Strain	USBR	Durango	
Noreen O'Donnell	"	"	
Rege Leach	USBR	970-385-6553	
Mark Chiarito	USBR	(970) 385-6577	(970) 385-6553
John Flynn			
Chris Seiler			